

## **ABSTRACT**

### **DEVICE FOR IMAGE PROCESSING WITH RECOGNITION AND SELECTION OF LIGHT SOURCES**

The invention relates to devices for processing images making it possible to identify, to process and to select discrete light sources present in a video image composed of pixels.

The aim is the presentation, in real time, to a user of a processed image allowing better recognition of light sources in a weakly contrasted image. In aeronautical use, this device affords a landing aid by allowing better recognition of runway lamps in conditions of degraded visibility, in particular in foggy weather.

The invention relies on three major principles:

- the main processing of images is performed only on a small number of pixels whose level is greater than a threshold;
- a likelihood estimator evaluates the probability of existence of sources in the image;
- the threshold is variable as a function of a certain number of parameters of the image.

**FIGURE 3**